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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/511,031

10/13/2004

Bernd Holl

6256

7590

12/30/2005

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Annandale, VA 22003

EXAMINER

ADDIE, RAYMOND W

ART UNIT

PAPER NUMBER

3671

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/511,031

Applicant(s)

HOLL ET AL.

Examiner

Raymond W. Addie

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/13/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the milling tube being integrally formed with both the radial supporting means and the tubular protection means for the output element must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure is objected to because the phrase "The invention relates to a" is redundant and should be --A--. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, Ins. 1-12, the phrase "characterized in that" is vague and indefinite, since it is unclear as to whether Ins. 1-11 constitute a preamble of the claim, or at least part of the body of the claim.

As written, claim 1 appears to be in the form of a "Jepson-type" claim, in which all claim language in the preamble of the independent claim is admitted by Applicant, to be old and well known in the art, and hence, only that subject matter following the preamble is considered by Applicant to be patentable over the prior art.

Hence, although Claim 1 does not explicitly recite the phrase "the improvement comprising", as is known in "Jepson-type" claims; Claim 1 is being examined as if all features cited in the preamble of claim 1, before the phrase "characterized in that", are admitted by Applicant to be old and well known in the art, and that the scope of the claimed subject matter is limited to the features and functions provided for in Claim 1, Ins. 13-19.

Claim 2 recites the limitations "the milling tube elements" in ln. 2; and "the milling tubes (10). There is insufficient antecedent basis for this limitation in the claim.

Claim 1 only provides for a single milling tube 10 not multiple tubes (10) as claimed.

Claim 1 further only provides for --a milling roll 4, which has a roll base body (14) and a milling tube (10)--.

Hence, it is indefinite as to whether "the milling tube elements" is introducing a new structural feature or modifying the milling tube (10) or the roll base body (14).

Claim 2, ln. 3, the phrase "the radial supporting means" lacks antecedent basis, since claim 1 does not provide for --a radial supporting means--. Hence, it is unclear as to what is being claimed.

Claim 3 the phrase "and/or" is vague in that repeated use of the phrase "and/or" creates multiple possible embodiments within a single claim. To the extent that it is

indefinite as to which elements are "integrally formed" and with what they are "integrally formed" therewith. For example, the "tubular protection means", which is undefined by the claim, could be integrally formed in and of itself, it could be integrally formed with the milling tube(s) and the radial supporting means, or the "tubular protection means could be integrally formed with just the "radial supporting means".

Hence, since the claim is presented with multiple alternative embodiments; Claim 3 is being examined such that only 2 features of the group of elements listed, are required to be integrally formed together.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States.

Claims 1-11, 13, 14, 19 are rejected under 35 U.S.C. 102(d) as being barred by applicant's foreign patent WO 01/04422 A1, reference to Gaertner et al.

Gaertner et al. discloses a self-propelled road milling machine having a chassis (2), supporting a milling roll (18) between lateral plates (16, 17). Said milling roll (18) comprising a roll base body (19) and a milling tube (25), adapted to be driven via a drive means (15), which is supported on an exterior of an input side lateral plate (16), and via

a reduction gear unit (22/32). Wherein the lateral plate (13) is situated opposite the lateral plate (12) and being easily detachable or dismountable for exchanging alternatively mountable milling tubes (25) and defining a null side of the machine against which one face of the milling roll (18) abuts in an approximately flush manner to enable a milling that is near to an edge.

The improvement comprising:

A reduction gear unit (22) is mounted on the drive input side, and further comprises a drive output element (32), which is mounted on the interior of the lateral plate (16) and whose shell surface (19) forms a seat for milling tube elements (25) that can be slid thereon from the null side, and that the roll base body (19) is coupled to the reduction gear unit (22) at the free front face of the drive output element (32) without hindering the milling tube elements being slid on. See translated Abstract; Fig. 3; Pages 9-16.

In regards to claims 2-6 Gaertner et al. discloses the milling tube consist of the ends of the milling tube (18) directed to the drive input side or of the radial supporting means (28) for the milling tube and is integrally formed with said radial supporting means. See Fig. 3. Gaertner et al. further discloses the road milling machine has a drive output element that has a circularly cylindrical cross-sectional shape, and consists of a housing of the reduction gear unit (22, 32); and that the roll base body (19) does not having a maximum outer diameter greater than the outer diameter of the output element (32). See Pages 11-12 and Fig. 3.

In regards to claims 7-10, Gaertner et al., discloses the output element (32) is able to receive tubular or annular radial supporting means (28) or protection means (33) on at least a part of the entire axial length, such that the radial supporting means (28) form a movable bearing for the milling tube (25) on the drive output (32). Wherein a centering means (43) for the roll base body (19) is arranged at the face side of the housing.

And that the free end of the roll base body (19) is supported in easily dismountable lateral plate (17).

In regards to claims 11, 13, 14 Gaertner et al. discloses a protection tube (38) covering the output element is mounted to the radial supporting means (33) for the milling tube (25) as a protection means. And that the roll base body (19) comprises a first face-side annular flange (unnumbered) adapted to be axially coupled to the face of the drive output element (32) from the null side as well as a second annular flange (unnumbered), see Fig. 4, radially seated on the roll base body (19) for rotation therewith, which is adapted to be axially coupled with a supporting means (28) projecting radially inwardly from the milling tube. Wherein a radial supporting ring (33) is arranged as a supporting means for the milling tube (25) at the face-side end of the milling tube (25) and is coaxially seated with a positive fit on the drive output element. See Pages 11-14; Figs. 3-6.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/04422

A1, reference to Gaertner et al., in view of McSharry # 6,210,071.

Gaertner et al. discloses essentially all that is claimed, except for the diameter of the drive unit housing (32). However, McSharry teaches it is known milling drums are provided in a variety of widths and lengths, dependent upon the material being milled, and that milling drums are typically less than 31" in diameter. Hence, it would be obvious the drive unit housing would have to be less than 400mm in diameter in order to accommodate small diameter milling drums. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the milling machine of Gaertner et al., with a drive unit housing of less than 400mm, as taught by McSharry, in order to accommodate small diameter milling drums. See Col. 5, Ins. 3-17.

6. Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/04422 A1, reference to Gaertner et al., in view of Murray et al. # 5,722,789. Gaertner et al. discloses essentially all that is claimed, to include a drive means (15) coupled to at least two, gear reduction stages in a milling roll-side gear unit portion (32/22) surrounded by a housing. But does not disclose axially offsetting the reduction unit from the drive means. However, Murray et al. teaches it is known to axially offset a gear reduction unit (40) from a drive means (112), and to couple said reduction unit (40) to at least one further reduction stage (136), via a drive shaft (56) in a milling roll-side gear unit portion, surrounded by a housing. Such that the gear reduction unit (40) is arranged on the side of an input-side lateral plate (46). And that doing so permits an operator to make flush cuts directly adjacent road barriers, bridge abutments and the like, that would be to the right of the machine. See Col. 6, lns. 15-27. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the milling machine of Gaertner et al., with an axially offset drive train, as taught by Murray et al., in order to permit flush cuts adjacent road barriers and the like.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gaertner et al. # 6,877,818 B1 discloses a construction machine and milling roller. McDarragh # 3,072,391 discloses a milling machine.


Art Unit: 3671

Hackmack # 4,852,946 discloses a milling device. Lindblom # 6,213,560 B1 discloses a variable width milling drum. Wirtgen # 4,614,379 discloses a milling machine. Haehn et al. # 5,893,677 discloses a road working machine. Thomas # 5,395,417 discloses a milling drum.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond W. Addie whose telephone number is 571 272-6986. The examiner can normally be reached on 6AM-2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 571 272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Raymond Addie
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Group 3600

12/22/05